

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
3 March 2005 (03.03.2005)

PCT

(10) International Publication Number
WO 2005/019221 A1

(51) International Patent Classification⁷: **C07D 487/04**,
A61K 31/519

(21) International Application Number:
PCT/US2004/025961

(22) International Filing Date: 11 August 2004 (11.08.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/495,650 15 August 2003 (15.08.2003) US

(71) Applicant (for all designated States except US): **MERCK & CO., INC.** [US/US]; 126 East Lincoln Avenue, Rahway, New Jersey 07065-0907 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **THOMPSON, Wayne** [US/US]; 126 East Lincoln Avenue, Rahway, New Jersey 07065-0907 (US). **YOUNG, Steven, D.** [US/US]; 126 East Lincoln Avenue, Rahway, New Jersey 07065-0907 (US). **PHILLIPS, Brian, T.** [US/US]; 126 East Lincoln Avenue, Rahway, New Jersey 07065-0907 (US). **MUNSON, Peter** [US/US]; 126 East Lincoln Avenue, Rahway, New Jersey 07065-0907 (US). **WHITTER, Willie** [US/US]; 126 East Lincoln Avenue, Rahway, New Jersey 07065-0907 (US). **LIVERTON, Nigel** [GB/US]; 126 East Lincoln Avenue, Rahway, New Jersey 07065-0907 (US). **DIECKHAUS, Christine** [US/US]; 126 East Lincoln Avenue, Rahway, New Jersey 07065-0907 (US). **BUTCHER, John** [US/US]; 126 East Lincoln Avenue, Rahway, New Jersey 07065-0907 (US). **MCCAULEY, James, A.** [US/US]; 126 East Lincoln Avenue, Rahway, New Jersey 07065-0907 (US). **MCINTYRE, Charles, J.** [US/US]; 126 East Lincoln Avenue,

Rahway, New Jersey 07065-0907 (US). **LAYTON, Mark, E.** [US/US]; 126 East Lincoln Avenue, Rahway, New Jersey 07065-0907 (US). **SANDERSON, Philip, E.** [GB/US]; 126 East Lincoln Avenue, Rahway, New Jersey 07065-0907 (US).

(74) Common Representative: **MERCK & CO., INC.**; 126 East Lincoln Avenue, Rahway, New Jersey 07065-0907 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

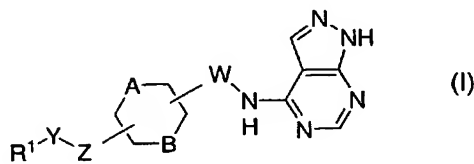
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: 4-CYCLOALKYLAMINOPYRAZOLO PYRIMIDINE NMDA/NR2B ANTAGONISTS



(57) Abstract: Compounds represented by Formula (I) or pharmaceutically acceptable salts thereof, are effective as NMDA/NR2B antagonists useful for treating neurological conditions such as, for example, pain, Parkinson's disease, Alzheimer's disease, epilepsy, depression, anxiety, ischemic brain injury including stroke, and other conditions.